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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,358	11/12/2003	Shinichi Fujii	15162/06280	6784
24367 7590 04/20/2007 SIDLEY AUSTIN LLP 717 NORTH HARWOOD SUITE 3400 DALLAS, TX 75201			EXAMINER DURNFORD-GESZVAIN, DILLON	
			ART UNIT	PAPER NUMBER
			2622	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/706,358	Applicant(s) FUJII ET AL.	
	Examiner Dillon Durnford-Geszvain	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims **6; 7, 9, 10, 11, 12, 15** and **16-20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim **6** recites the limitation "the track" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claims **7, 9, 10, 11, 12** and **15** contain similar recitations and are rejected for the same reason. As it is completely unclear from the claims what "the track" is intended to claim, examination on the merits of the presently identified claims is precluded.

5. Claim **16** recites the limitation, "when the present infocus position becomes unspecified during control in the first control mode, control in the first mode is continued." It is completely unclear to the Examiner what subject matter this limitation is intended to claim. The Examiner does not know what "the present infocus position becom[ing] unspecified" means. Furthermore, it is not clear from the specification what

the limitation is intended to mean.

Claims **16-20** contain similar recitations or simply depend from the indefinite claim and are therefore rejected on the same grounds.

Examination on the merits of the presently identified claims is precluded, as the Examiner cannot identify the subject matter that is intended to be claimed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims **1-5, 8, 13** and **14** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pre-Grant Publication 2003/0174230 (Ide et al.) in view of US Pre-Grant Publication 2003/0146988 (Shiraishi).

As to claim 1, Ide et al. Teaches an image capturing apparatus for capturing image data on the basis of a light image acquired by an optical system, comprising: a focusing member 211 (See Fig. 1 and [0047]) for achieving focus by moving said optical system to an infocus position; and a controller 211 for moving a position of a focus area FR (see Fig. 5) which is set in an image formed by the light image so that the focus area includes a main subject ([0065]), determining a present focus position from a plurality of pieces of information in the focus area (see Fig. 6 and [0068]), obtained by driving said optical system around a reference position (Fig. 7), wherein at the time of losing track of the main subject during its control, said controller continues to drive said optical system around a reference position (note that if the subject moves out of the area FR the system will continue to perform focusing).

What Ide et al. does not teach is that the system is driven around a reference position determined on the basis of a prior or the latest in-focus position. However, Shiraishi teaches a shortened focus driving that is driven around a previous in-focus position ([0051]). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the shortened focusing of Shiraishi in the system taught by Ide et al. as this would conserve battery power by not requiring focusing to be reinitiated from scratch every time.

As to claim 2, see the rejection of claim 1 and note that Ide et al. further teaches the image capturing apparatus according to claim 1, wherein at the time of losing track of the main subject during its control, said controller continuously uses a focus area in

which the latest infocus position is obtained (note that the user must change the focus area and therefore the apparatus of Ide et al. would continue to use the focus area before losing track of the main subject).

As to claim 3, see the rejection of claim 1 and note that the apparatus taught by Ide et al. in view of Shiraishi further teaches the image capturing apparatus according to claim 1, wherein at the time of losing track of the main subject during its control, said controller specifies an area of which image information is similar to image information of the focus area in which the latest infocus position is obtained, and uses the focus area specified (note that as the (note that the focus position is calculated after every frame of the preview image, see Fig. 2 of Shiraishi, and therefore, as a subject cannot move fast enough to completely escape the focus area in between imaging operations the focus area will always contain image data somewhat similar to image data of the focus area in which the latest in-focus position was obtained).

As to claim 4, see the rejection of claim 1 and note that the apparatus taught by Ide et al. in view of Shiraishi further teaches the image capturing apparatus according to claim 1, wherein when the main subject cannot be found after continuing to drive said optical system for predetermined time around the reference position determined on the basis of the latest infocus position, said controller determines a present infocus position irrespective of the reference position determined on the basis of the latest infocus position (Note that if the difference between a current evaluation value and a previous

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evaluation value is greater than a threshold, normal auto-focus is carried out, see Fig. 2 of shiraishi and [0052]).

As to claim 5, see the rejection of claim 4 and note that Ide et al. further teaches the image capturing apparatus according to claim 4, wherein at the time of determining a present infocus position irrespective of the reference position determined on the basis of the latest infocus position, said controller uses a focus area in a predetermined default position (see Fig. 4 of Ide et al. and note that the default position is the center of the image).

As to claim 8, see the rejection of claim 1 and note that the apparatus taught by the combination of Ide et al. and Shiraishi further teaches the image capturing apparatus according to claim 1, wherein the plurality of pieces of information in the focus area obtained by driving said optical system around the reference position is information obtained on both sides of the reference position (see [0050] of Shiraishi).

As to claim 13, see the rejection of claim 3 and note that Shiraishi further teaches that the image information is brightness information or color information ([0062])

As to claim 14, see the rejection of claim 1 and note that Ide et al. further teaches the image capturing apparatus according to claim 1, wherein a plurality of local focus areas in different positions are set in an image, and the focus area is selected from the

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local focus areas (note that Ide et al. teaches a near infinite number of local focus areas selected using four-way switch 60 and one of these positions is inherently selected).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 7,053,953 (Belz et al.). US 2003/0142224 (Fukudu et al.). US 2003/0063211 (Watanabe et al.). US 2006/0139478 (Nozaki). US 6,249,317 (Hashimoto et al.). US 5,121,152 (Wagner). US 5,900,927 (Hasegawa).

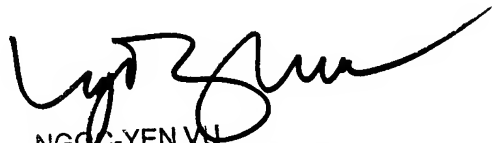
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon Durnford-Geszvain whose telephone number is (571) 272-2829. The examiner can normally be reached on Monday through Friday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dillon Durnford-Geszvain

4/15/07



NGOC-YEN VU
SUPERVISORY PATENT EXAMINER